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The time period for reply, if any, is set in the attached communication.

DETAILED ACTION

This final rejection is in response to Applicant's arguments which were filed on 1/5/2010. No claims are amended. Claims 1-23 are presented for further examination.

I. RESPONSE TO ARGUMENTS

A. *McCanne* is not limited to permitting or inhibiting distribution of a particular message based on media type as argued by Applicant.

Applicant argues that *McCanne* only discloses permitting or inhibiting distribution of a message based on media type rather than the content of the message. However, the cited passage in *McCanne* clearly discloses that the invention is directed to providing "application-level control to be applied to transferred data" [column 2 «lines 60-61»].

One of ordinary skill in the art would clearly understand that "application-level control" entails looking at the content of the message. *McCanne* discloses that "[t]he sender sends control information indicating the overlay group that is to be used and *application-level information that describes the contents of the transmission*" (emphasis added) [column 11 «lines 60-63»].

While the cited passage does describe one example of control as applied to video or audio traffic, the broader disclosure of *McCanne*'s invention clearly describes looking at application-level data within a message to determine whether to distribute the message. *McCanne* provides other examples of application-level routing by looking at the content of a message.

For example, *McCanne* discloses that "[p]ackets are dropped by the overlay network if the setup mint is not present, including the time during which the setup mint is in transit" [column 6 «lines 60-62»]. As defined by *McCanne*, a "setup mint" refers to identifier within a database that is carried within the packet [column 6 «lines 37-44»].

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In this example, packets are inhibited from being distributed because they lack certain identifier within the packet itself. Because it is within the packet, that particular identifier reads on Applicant's claimed "content."

As another example, *McCanne* also discloses:

As such, a router forwards a packet only if it arrives from one of its peers within the appropriate transit VIF. That is, a router accepts a packet only if it came from a peer router that it expected it to come from (*which it can check since, unlike network-layer multicast, the peer's IP address appears explicitly in the packet*) (emphasis added). [column 19 «lines 51-59»].

As the router looks within the packet for the IP address within the packet (i.e., the content) to determining whether to route the packet, the IP address may also be interpreted as the content of the message.

Contrary to Applicant's argument, *McCanne* does not limit his invention to routing packets based on media type. Instead, *McCanne* discloses routing packets based on application level information which is stored within a packet. Because the application level information is stored in a packet, it is properly interpreted as "content" of the message.

For the foregoing reasons, Applicant's arguments are not persuasive. The rejections set forth in the previous action are therefore maintained.

II. CLAIM REJECTIONS - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1),

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(2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

A. Claims 1, 3, 4, 6-8, 10, 11, 14-20, 22, and 23 are rejected under 35 U.S.C. 102(e) as being anticipated by *McCanne*, U.S. Patent No. 6.611.872.

Claim 1

McCanne discloses a distributed network computing environment, comprising:

a plurality of clients communicating within a multicast cloud distributed network [column 2 «lines 12-17»] using content-specific data within messages to implement data routing and message culling in a groupware application [column 2 «line 60» to column 3 «line 8»: using application level data within the packet to control packet distribution | column 4 «lines 20-42»: routers modified to implement routing based on application-specific packets]; and

one or more network routing modules or router-embedded applets operative, in addition to normal packet-routing [column 4 «lines 60-65»: regular unicast routing], to permit or inhibit the distribution of a particular message based upon the content of the message [column 2 «line 60» to column 3 «line 8»].

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Claim 3

McCanne discloses the environment of claim 1, wherein the application is a client-selectable and controllable data service associated with the distribution of audio, video, or other digital signal streams [column 2 «lines 25-31»: digital audio, video/media applications].

Claim 4

McCanne discloses the environment of claim 1, wherein the clients enter, leave, and interact with the cloud through a lobby manager [column 9 «lines 24-42»: *McCanne*'s designated router reads on the lobby manager. The designated router receives requests to join the multicast group | column 17 «lines 35-43»: using leave messages to leave the multicast group].

Claim 6

McCanne discloses the environment of claim 4, wherein the lobby manager is further operative to simultaneously support multiple clouds through multicast or replicated unicast protocols [column 2 «lines 45-49»: joining disjoint and isolated multicast clouds].

Claim 7

McCanne discloses the environment of claim 1, wherein the routing modules implement application-specific message culling to reduce client-cloud communications [column 2 «line 60» to column 3 «line 8»: MediaBridge intelligently filtering flows so that they fit onto a link when there is extra high-bandwidth video flows arriving at a choke point].

Claims 8 and 20

McCanne discloses the environment of claim 7, wherein the message culling includes message omission, rerouting, and other quality-of-service modifications [column 2 «line 60» to column 3 «line 8» | column 26 «lines 53-56»].

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Claim 10

McCanne discloses the application is a massive groupware application involving thousands of world-wide participants [column 1 «lines 29-46»: *McCanne*'s invention directed at delivering media information to "massive numbers of end-users at once"].

Claim 11

McCanne discloses a distributed network computing environment, comprising:

a network-enabled client application [Fig. 2: client];

at least one lobby manager that facilitates communications between the client application and a federation [column 9 «lines 24-42»: *McCanne*'s designated router reads on the lobby manager. The designated router receives requests to join the multicast group]; and

one or more network routing modules or router-embedded applets operative, in addition to normal packet-routing, to permit or inhibit the distribution of a particular message based upon the content of the message to reduce the communications with the federation [column 4 «lines 60-65»: regular unicast routing], to permit or inhibit the distribution of a particular message based upon the content of the message [column 2 «line 60» to column 3 «line 8»].

Claims 14 and 15

McCanne discloses the environment of claim 11, wherein the application is a client selectable and controllable data service [column 2 «lines 25-31»: digital audio, video/media applications], wherein the data service includes audio, video, or other type of digital signal feed [column 2 «lines 25-31»].

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Claim 16

McCanne discloses the environment of claim 11, wherein the routing modules further support a point-to-multipoint distributed communications model between clients [abstract: multicast].

Claim 17

McCanne discloses the environment of claim 11, wherein: at least some of the client applications run on host platforms [column 5 «lines 20-22»: end hosts | column 6 «lines 11-14»]; and the routing modules further support conventional internet packet routing among the hosts [column 4 «lines 60-65»: regular unicast routing].

Claim 18

McCanne discloses the environment of claim 11, wherein the routing modules further support one or more conventional multicast protocols [abstract: multicast routing].

Claims 22 and 23

McCanne discloses the environment of claim 11, wherein the lobby manager is further operative to simultaneously process multiple federations [column 2 «lines 45-49»: joining disjoint and isolated multicast clouds], wherein the federations communicate through multicast or replicated unicast protocols column 2 «lines 45-49»: joining disjoint and isolated multicast clouds].

III. CLAIM REJECTIONS - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

A. Claims 2, 12, and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over *McCanne* in view of *Lambright et al.* (U.S. Patent Number 6,015,348), hereinafter referred to as *Lambright*.

Lambright was previously cited by Applicant in the IDS filed on 7/22/2004.

Claims 2, 12, and 13

McCanne does not expressly disclose that the application is a distributed simulation or game. However, *McCanne* does disclose an application as a multi-user digital audio/video/media application operating in a distributed manner across heterogeneous networks [column 2 «lines 25-31»]. Like *McCanne*, *Lambright* also discloses a multi-user digital media application but *Lambright* further disclose this application is a game that can be implemented for thousands of participants [column 1 «lines 14-33»].

Since the inventions of *McCanne* and *Lambright* encompass the same field of endeavor, it would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to modify *McCanne*'s multi-user digital video/audio application by adding the use of an application which was a simulation or game and the ability to reach thousands of participants as provided by *Lambright*. This would make sense because it would be an ideal utilization of the network for a different purpose, specifically online gaming. See MPEP § 2143.

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B. Claims 5 and 21 are rejected under 35 U.S.C. § 103(a) as being unpatentable over *McCanne* in view of *Engstrom* et al, U.S. Patent No. 6.463.078 ["*Engstrom*"].

McCanne does not expressly disclose that the lobby manager is further operative to validate the client application for compatibility with the federation and download data to correct for deficiencies. However, such a feature was well known in the art at the time of Applicant's invention as evidenced by *Engstrom*.

Like *McCanne*, *Engstrom* is directed to a multi-user digital media application. *Engstrom* discloses a multi-user video game that includes a lobby manager wherein the lobby manager is further operative to validate the client application for compatibility with the federation and download data to correct for deficiencies [column 16 «lines 1-20»: lobby manager used to determine compatible applications and to download specific parameters to insure compatibility].

It would have been obvious to one of ordinary skill in the art to have modified *McCanne* to include the functionality of *Engstrom*'s lobby manager. Such a modification is an example of using a known technique [*Engstrom*'s lobby manager checks for compatible applications on user computers] to improve similar system [*McCanne*'s multi-user digital media application] in the same way [*McCanne*'s system improved because application with different versions may still communicate with one another]. See MPEP § 2143.

C. Claims 9 and 19 are rejected under 35 U.S.C. § 103 (a) as being unpatentable over *McCanne* in view of *Bayrakeri*, U.S. Patent No. 6.185.602.

McCanne does not expressly disclose the application communicates internal state changes into the cloud or federation through an API. However, such a feature was well known in the art at the time of Applicant's invention as evidenced by *Bayrakeri*. Like *McCanne*, *Bayrakeri* is directed to a system of multi-user interaction for multimedia communication [Fig. 4

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«item 412» | column 2 «lines 14-22»]. *McCanne* further discloses an application communicating internal state changes into a multicast cloud through an API [column 6 «lines 52-65»].

It would have been obvious to one of ordinary skill in the art to have modified *McCanne*'s system to include *Bayrakeri*'s API for communicating state changes through a multicast network. Such a modification is an example of using a known technique [*Bayrakeri*'s API for using multicast to communicate state changes between devices] to improve similar systems (*McCanne*'s multicast overlay network) in the same way [*McCanne*'s network modified to include the messaging API so that devices can keep each other updated as to their states]. See *MPEP* § 2143.

IV. CONCLUSION

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to DOHM CHANKONG whose telephone number is (571)272-3942. The examiner can normally be reached on Monday to Friday [10 am - 6 pm].

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thu Nguyen can be reached on (571)272-6967. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/DOHM CHANKONG/
Primary Examiner, Art Unit 2452